

[2345/41A]

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)

HAGENAUER et al.

RECEIVED.

Serial No.

10/043,710

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Filed

January 9, 2002

**Technology Center 2600** 

For

DECODING METHOD AND DECODING DEVICE FOR A CDMA TRANSMISSION SYSTEM FOR

DEMODULATING A RECEIVED SIGNAL

AVAILABLE IN SERIAL CODE CONCATENATION

Examiner

K. Burd

Art Unit

2631

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

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Signature: \(\sumbox\) \(\lambda\) \(\lambda\) \(\lambda\) \(\text{Reg. No. 47.084}\) \(\text{Linda M. Shudy (Reg. No. 47.084}\)

## **AMENDMENT**

SIR:

In response to the Office Action mailed on November 14, 2002, please reconsider the above-identified application based on the following:

## IN THE CLAIMS:

Please amend without prejudice claims 1, 10 to 15 and 17, as follows:

1. (Amended) A decoding method for demodulating a received signal available in serial code concatenation in a code-division multiple access transmission system, a two-step coding being carried out at the transmitting end of the transmission system, the method comprising:

providing a soft-in/soft-out decoder in a receiver of the transmission system, a first decoder step of the soft-in/soft-out decoder including an inner decoder and a Hadamard orthogonal multi-step inner code, a second decoder step of the soft-in/soft-out